

WHAT IS CLAIMED IS:

1 *Sub B1* 1. A universal asynchronous receiver transmitter (UART) comprising:  
2 a first-in, first-out (FIFO) buffer;  
3 a circuit for detecting a last word transmitted from said FIFO buffer;  
4 a transmitter empty circuit for generating a transmitter empty signal on a  
5 transmitter empty control line when a last word transmitted from said FIFO buffer is  
6 detected;  
7 a delay circuit for delaying generation of said transmitter empty signal for  
8 a programmable delay time; and  
9 a programmable register for setting said programmable delay time.

1 2. The UART of claim 1 wherein said transmitter empty signal is an  
2 internal signal triggered from a stop bit of said last word.

1 *Sub A2* 3. The UART of claim 1 wherein said programmable register comprises a  
2 shadow register which is a write-only portion of a register only read by a user.

1 4. The UART of claim 3 wherein said write-only portion comprises the  
2 first 4 bits of a modem status register.

1 *Sub B1 register* 5. The UART of claim 1 wherein said programmable register is a four bit  
2

1 6. The UART of claim 1 further comprising:  
2 a plurality of channels, each channel having said FIFO buffer, said circuit  
3 for detecting a last word and said transmitter empty circuit; and  
4 said delay circuit and said programmable register being a single circuit and  
5 register connected to control the delay of said transmitter empty signal for each of said  
6 channels.

1 *Sub A3* 7. ~~A universal asynchronous receiver transmitter (UART) comprising:~~  
2 ~~a first-in, first-out (FIFO) buffer;~~  
3 ~~a circuit for detecting a last word transmitted from said FIFO buffer;~~  
4 ~~a transmitter empty circuit for generating a transmitter empty signal on a~~  
5 ~~transmitter empty control line when a last word transmitted from said FIFO buffer is~~

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6 detected, wherein said transmitter empty signal is an internal signal triggered from a stop  
7 bit of said last word;  
8 a delay circuit for delaying generation of said transmitter empty signal for  
9 a programmable delay time;  
10 a programmable register for setting said programmable delay time,  
11 wherein said programmable register comprises a shadow register which is a write-only  
12 portion of a register only read by a user;  
13 a plurality of channels, each channel having said FIFO buffer, said circuit  
14 for detecting a last word and said transmitter empty circuit; and  
15 said delay circuit and said programmable register being a single circuit and  
16 register connected to control the delay of said transmitter empty signal for each of said  
17 channels.

1 8. The UART of claim 3 wherein said write-only portion comprises the  
2 first 4 bits of a modem status register.

1 9. The UART of claim 1 wherein said programmable register is a four bit  
2 register.

1 10. The UART of claim 7 further comprising at least 8 of said channels.

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